

Cooper, Jamal

From: Gordon, Lisa Perras
Sent: Monday, February 6, 2017 10:59 AM
To: Cooper, Jamal
Subject: FW: Safe Yield in the Upper Saluda Watershed (SC)
Attachments: RuhlmanM-2016WRCpaper-final2.pdf

From: Somerville, Eric
Sent: Friday, February 03, 2017 3:35 PM
To: Gordon, Lisa Perras <Gordon.Lisa-Perras@epa.gov>
Subject: FW: Safe Yield in the Upper Saluda Watershed (SC)

Thought you might find this paper interesting.

ABSTRACT. Safe yield (SY) is generally presumed to be the upper threshold of water available for withdrawal without causing adverse impacts. United States Geological Survey (USGS) gaging station data in the Upper Saluda Watershed were used to compare calculated regulatory SY levels to measured streamflow. Regulatory SY levels were determined in accordance with the South Carolina Surface Water Withdrawal, Permitting, Use and Reporting Act and implementing regulations. The percentage of average daily streamflow readings that occurred below regulatory SY levels was determined for each gaging station location and ranged from 50 to 68 percent. These data indicate that SY flow, as defined by the South Carolina law, is not present in streams and rivers for more than half the time. Therefore, use of this regulatory definition of SY as an upper threshold for registration and permitting decisions could lead to over-allocation and impairment of South Carolina's surface water resources.